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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-----------------|----------------------|-------------------------|------------------|
| 10/788,866 | 02/27/2004 | Fred J. Molz | 4002-3434 / PC834.00 | 7218 |
| 30565 | 7590 11/24/2006 | • | EXAMINER | |
| WOODARD, EMHARDT, MORIARTY, MCNETT & HENRY LLP | | | REIMERS, ANNETTE R | |
| 111 MONUMENT CIRCLE, SUITE 37 INDIANAPOLIS, IN 46204-5137 | | 700 | ART UNIT | PAPER NUMBER |
| | | | 3733 | |
| | | | DATE MAILED: 11/24/2006 | |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | Application No. | Applicant(s) | | | | |
|---|--|--|--|--|--|--|
| | 10/788,866 | MOLZ ET AL. | | | | |
| Office Action Summary | Examiner | Art Unit | | | | |
| | Annette R. Reimers | 3733 | | | | |
| The MAILING DATE of this communication app Period for Reply | ears on the cover sheet with the c | orrespondence address | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period was pailing to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). | ATE OF THIS COMMUNICATION 16(a). In no event, however, may a reply be tin 17 apply and will expire SIX (6) MONTHS from 18 cause the application to become ABANDONE | N. nely filed the mailing date of this communication. (D) (35 U.S.C. § 133). | | | | |
| Status | | | | | | |
| 1)⊠ Responsive to communication(s) filed on <u>06 Se</u> | eptember 2006. | | | | | |
| | action is non-final. | | | | | |
| · <u> </u> | ' | | | | | |
| closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. | | | | | | |
| Disposition of Claims | | | | | | |
| 4)⊠ Claim(s) <u>1-58</u> is/are pending in the application. | | | | | | |
| 4a) Of the above claim(s) <u>8,12,17 and 38-58</u> is/are withdrawn from consideration. | | | | | | |
| 5) Claim(s) is/are allowed. | | | | | | |
| 6)⊠ Claim(s) <u>1-7,9-11,13-16 and 18-37</u> is/are rejected. | | | | | | |
| 7) Claim(s) is/are objected to. | | | | | | |
| 8) Claim(s) are subject to restriction and/or | election requirement. | | | | | |
| Application Papers | | | | | | |
| | | | | | | |
| 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on <u>27 February 2004</u> is/are: a) accepted or b) objected to by the Examiner. | | | | | | |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | | |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). | | | | | | |
| 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. | | | | | | |
| Priority under 35 U.S.C. § 119 | | | | | | |
| • | priority under 35 U.S.C. & 110/a |) (d) or (f) | | | | |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). | | | | | | |
| a) All b) Some * c) None of: | | | | | | |
| 1. Certified copies of the priority documents have been received. | | | | | | |
| 2. Certified copies of the priority documents have been received in Application No | | | | | | |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). | | | | | | |
| * See the attached detailed Office action for a list of the certified copies not received. | | | | | | |
| See the attached detailed Office action for a list | or the certified copies not receive | su. | | | | |
| | | | | | | |
| Attachment(s) | A) [] | (PTO 412) | | | | |
| Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) | 4) Interview Summary (PTO-413) Paper No(s)/Mail Date | | | | | |
| 3) X Information Disclosure Statement(s) (PTO/SB/08) | 5) 🔲 Notice of Informal F | | | | | |
| Paper No(s)/Mail Date 9/35/06 | 6) | | | | | |

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DETAILED ACTION

Election/Restrictions

Applicant's election with traverse of claims 1-37 and Species I, figure 1, in the reply filed on September 06, 2006 is acknowledged. The traversal is on the ground(s) that there will be no significant extra burden in searching and examining both sets of claims. In response to applicant's argument that the search of all the inventions is similar and, thus, the burden on the examiner would not be significant, "a serious burden on the examiner may be prima facie shown if the examiner shows by appropriate explanation of separate classification" (see M.P.E.P. § 808.02). In the instant case, the inventions have separate classifications. Furthermore, examiner respectfully disagrees with applicant since the method claims include structural and functional limitations not disclosed in the apparatus claims, e.g. the tether secured to more than two bones, cutting the tether to a desired length and heat sealing the cut ends of the tether. The requirement is still deemed proper and is therefore made FINAL.

Examiner further acknowledges applicant's election of Species I, figure 1. Examiner also acknowledges that applicant believes that claims 1-37 read on the elected claims. Examiner agrees with applicant regarding all claims except 8, 12 and 17. Figure 1 does not have the radiopaque element comprising a single radiopaque filament woven in the plurality of fibers as disclosed in claims 8 and 12. This element is found in figures 2 and 3, which were not elected by applicant. Regarding claim 17, figure 1 does not disclose the radioopque fiber being embedded within the second

sheath. This element is found in figure 3, which was not elected by applicant. Examiner agrees with applicant that claims 1, 36 and 37 appear to be generic.

Claims 8, 12, 17 and 38-58 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on September 06, 2006.

The requirement is still deemed proper and is therefore made FINAL.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1-5, 10, 14-15, 18-26, 28-30, 32-34 and 36-37 are rejected under 35 U.S.C. 102(b) as being anticipated by Dunn et al. (US Patent Number 4,731,084).

Dunn et al. disclose a surgical tether for orthopedic treatment to secure to two adjacent bone portions, the tether comprising a single fiber elastomeric, flexible cord, e.g. 30, having a tensile strength sufficient to maintain a desired distance or orientation of the two bone portions; a flexible first sheath, e.g. 20, substantially encasing the cord, the first sheath comprising a plurality of fibers and providing an abrasion resistant coating to the cord; a radiopaque element comprising barium sulfate; and a second sheath, e.g. 40, the second sheath substantially encasing the first sheath, wherein the cord is slidably received within the second outer cord, wherein the cord is elongate and

defines a longitudinal axis and wherein the cord is free to move longitudinally with respect to the first sheath, wherein the first and second sheaths are frictionally engaged with each other, wherein the second sheath is not fixedly secured to either the cord or the first sheath, wherein the radiopaque element comprises one or more radiopaque filaments spirally wound around at least one of the cord, the first sheath or the second sheath, wherein the tether is attached to a plurality of bone portions, wherein the two bone portions include a first and second vertebrae, wherein the two bone portions include an articulating joint, wherein the cord is composed of a polymeric material selected from the group consisting of: polyethylene, ultra high molecular weight polyethylene, polypropylene, fluoropolymers, polytetrafluoroethylene, polyamides, polyethylene terephthalate, polyesters, polyaramid, silicon rubbers, polyurethane, polyvinylchloride, wherein the first sheath is composed of a material different from the cord, wherein the first sheath is composed of a material selected from the group consisting of: polyethylene, polypropylene, fluoropolymers, polytetrafluoroethylene, polyamides, polyethylene terephthalate, polyesters, polyaramid, silicon rubbers, polyurethane, polyvinylchloride, wherein the cord and first sheath are composed of a non-biodegradable material, wherein the radiopaque element is composed of a biocompatible metallic fiber, wherein the radiopaque element is composed of a material selected from the group consisting of: nitinol, titanium, titanium-vanadium-aluminum alloy, cobalt-chromium alloy, cobalt-chromium-molybdenum alloy, cobalt-nickelchromium-molybdenum alloy, stainless steel, tantalum, niobium, hafnium, tungsten, gold, silver, platinum, and iridium metals, alloys, and mixtures thereof. A first bone fastener and a second bone fastener to secure the tether to the two bone portions, wherein the first and second bone fasteners secure the cord to the first and second bone portions, wherein the second sheath is not secured to the two or more bone portions (see figures 1-5, column 5, lines 5-19 and column 6, lines 37-39).

With regard to the statement of intended use and other functional statements, they do not impose any structural limitations on the claims distinguishable over Dunn et al., which is capable of being used as claimed if one so desires to do so. *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963). Furthermore, the law of anticipation does not require that the reference "teach" what the subject patent teaches, but rather it is only necessary that the claims under attack "read on" something in the reference. Kalman v. Kimberly Clark Corp., 218 USPQ 781 (CCPA 1983). Furthermore, the manner in which a device is intended to be employed does not differentiate the claimed apparatus from prior art apparatus satisfying the claimed structural limitations. Ex parte Masham, 2 USPQ2d 1647 (1987).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-4, 6-7, 9-11, 13-16, 18 23, 29, 31 and 36-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Poirier et al. (US Pat 2,737,075) in view of Dunn et al. (US Patent Number 4,731,084).

Poirier et al. disclose a surgical tether for orthopedic treatment to secure to two adjacent bone portions, the tether comprising a braided plurality fiber elastomeric, flexible cord, e.g. 12, having a tensile strength sufficient to maintain a desired distance or orientation of the two bone portions; a flexible first sheath, e.g. 16, substantially encasing the cord, the first sheath comprising a plurality of fibers and providing an abrasion resistant coating to the cord; and a second sheath, e.g. 20, the second sheath comprising a plurality of braided fibers substantially encases the first sheath, wherein the cord is slidably received within the second outer cord, wherein the cord is elongate and defines a longitudinal axis and wherein the cord is free to move longitudinally with respect to the first sheath, wherein the first and second sheaths are frictionally engaged with each other, wherein second sheath is not fixedly secured to either the cord or the first sheath (see figure 1 and column 2, lines 14-19).

Poirier et al. disclose the claimed invention except for a radiopaque element and first and second bone fasteners securing the cord to the first and second bone portions. Dunn et al. disclose a tether containing a radiopaque element and the use of bone fasteners and teach the use of a radiopaque element to radiographically visualize the prosthetic ligament and the use of fasteners to connect the prosthetic ligament to bone (see column 3, lines 9-12 and 25-27). It would have been obvious to one skilled in the art at the time the invention was made to construct the device of Poirier et al. with a radiopaque element and first and second bone fasteners securing the cord to the first and second bone portions., in view of Dunn et al., to radiographically visualize the prosthetic ligament and to connect the prosthetic ligament to bone. In addition, any of

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the sheaths and the core can contain the radiopaque element and the radiopaque element can comprise a plurality of fibers, from either the core or the sheaths or e.g. 26 of Poirier et al. Furthermore, if the cord of Poirier et al. was secured by first and second bone fasteners, the first sheath, i.e. 16, would not be secured to the two bone portions.

Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dunn et al. (US Patent Number 4,731,084) in view of Hlavacek et al. (US Patent Number 4,792,336).

Dunn et al. disclose the claimed invention except the cord and the first sheath being biodegradable. Hlavacek et al. disclose a biodegradable tether and the use of a biodegradable material to permit adequate time for new tissue ingrowth or revascularization (see column 4, lines 38-39). It would have been obvious to one skilled in the art at the time the invention was made to construct the device of Dunn et al. with the cord and the first sheath being biodegradable, in view of Hlavacek et al. to permit adequate time for new tissue ingrowth or revascularization.

Claim 35 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dunn et al. (US Patent Number 4,731,084).

Dunn et al. disclose the claimed invention except the radiopaque element exhibits an effective duration in vivo of between about one month and about 5 years. It would have been obvious to one having ordinary skill in the art at the time the invention was made to construct the device of Dunn et al. with the radiopaque element exhibits an effective duration in vivo of between about one month and about 5 years, since it has been held that where the general conditions of a claim are disclosed in the prior art,

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discovering the optimum or workable ranges involves only routine skill in the art. In re Aller, 105 USPQ 233.

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Response to Arguments

Applicant's arguments with respect to claims 1-37 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO 892 for art cited of interest.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Annette R. Reimers whose telephone number is (571) 272-7135. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eduardo Robert can be reached on (571) 272-4719. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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